



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,873	08/02/2001	Hideo Namiki	071671-0158	4172
22428	7590	08/22/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			MEW, KEVIN D	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,873

Applicant(s)

NAMIKI, HIDEO

Examiner

Kevin Mew

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In particular, the phrase "A method of forwarding a network packet is described" should be corrected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugar (USP 5,790,538).

Regarding claim 1, Sugar discloses a synchronous data transmission system for transmitting (synchronizing a receiving clock's frequency with a transmitting clock's frequency, see col. 1, lines 5-12) such data as voice or image data (voice transmission, see Fig. 1) between a first (a transmitting unit) and a second terminals (a receiving unit) via an

asynchronous transmission line (asynchronous data transmission over a communication network, see col. 3, lines 33-49), wherein:

the first and second terminals each comprise a data generator (voice encoder, see element 50, Fig. 7) and a data reproducer (voice decoder, see element 4, Fig. 7) operable under control of a clock from a sampling clock generator (Resampler, see element 8, Fig. 7), and a transmission buffer (PCM CODEC) and a plurality of reception buffer stages (Voice Sample FIFO, see element 6, Fig. 7) connected to the data generator (voice encoder, see Fig. 7) and the data reproducer (voice decoder, see Fig. 7), respectively (see Fig. 7).

Regarding claim 2, Sugar discloses a synchronous data transmission system for transmitting (synchronizing a receiving clock's frequency with a transmitting clock's frequency, see col. 1, lines 5-12) such data as voice or image data (voice transmission, see Fig. 1) between a first (a transmitting unit) and a second terminals (a receiving unit) via an asynchronous transmission line (asynchronous data transmission over a communication network, see col. 3, lines 33-49), wherein:

the first and second terminals each comprise a data generator (voice encoder, see element 50, Fig. 7) and a data reproducer (voice decoder, see element 4, Fig. 7) operable under control of a clock from a sampling clock generator (Resampler, see element 8, Fig. 7), and a transmission buffer (PCM CODEC) and a plurality of reception buffer stages (Voice Sample FIFO, see element 6, Fig. 7) connected to the data generator (voice encoder, see Fig. 7) and the data reproducer (voice decoder, see Fig. 7), respectively (see Fig. 7), and the first and second

terminals each further comprise an asynchronous transmission line interface connected to the asynchronous transmission line (DSP interface 38, see Fig. 7).

Regarding claim 3, Sugar discloses the synchronous data transmission system according to claim 1 or 2, wherein which further comprises a clock synchronizing means for synchronizing clocks generated in the sampling clock generators in the first and second terminals (synchronize a receiving clock's frequency with a transmitting clock's frequency, see col. 1, lines 5-12).

Regarding claim 4, Sugar discloses the synchronous data transmission system according to claim 1 or 2, which further comprises a frequency difference eliminating means (clock frequency recovery module, see element 10, Fig. 1) for eliminating the frequency difference between the clocks generated in the sampling clock generators in the first and second terminals (clock frequency recovery is needed where the receiver clock frequency differs from the transmitter clock frequency, see col. 4, lines 12-26).

Regarding claim 5, Sugar discloses the synchronous data transmission system according to claim 1 or 2, wherein a synchronous data transmission line is connected to the data generators (voice encoder, see Fig. 7) and the data reproducers (voice decoder, see Fig. 7) in the first and second terminals (isochronous data transmission between a receiving unit and a transmitting unit over a communication network, see col. 3, lines 33-49).

Regarding claim 6, Sugar discloses the synchronous data transmission system according to claim 2, wherein the sampling clock generators in the first and second terminals are controlled (clock frequency recovery is utilized) on the basis of the received data from the asynchronous transmission line interface (if the average FIFO voice size increases, see col. 4, lines 12-26).

Regarding claim 7, Sugar discloses a synchronous data transmission system (synchronizing a receiving clock's frequency with a transmitting clock's frequency, see col. 1, lines 5-12) comprising a first and a second terminals and a synchronous transmission line (isochronous data transmission over a communication network, see col. 3, lines 33-49) connected between first and a second terminals (a receiving unit and a transmitting unit, see col. 3, lines 33-49) for voice or image communication with each other (voice transmission), each terminal including a voice or image input means (PCM CODEC, see Fig. 7), a sampling clock generator (f_{local} , see Fig. 7), an A/D converter for digitalizing the output of the voice input means (A/D converter, see Fig. 7), a data generator (voice encoder), operable with the output of the sampling clock generators (f_{local} , see Fig. 7) for generating data on the basis of the output of the A/D converter (see Fig. 7), a transmission buffer receiving the generated data (PCM CODEC, see Fig. 7), a plurality of reception buffer stages supplied with the received data (Voice Sample FIFO, see element 6, Fig. 7) via a asynchronous transmission line, a data reproducer (Data Decoder, see element 4, Fig. 7) operable with the output of the sampling clock generator (f_{local} , see Fig. 7), for reproducing data from the plurality of reception buffer stages, a D/A converter for converting the reproduced data to an analog signal (D/A converter), a voice or image output means (PCM CODEC, see Fig. 7) for outputting voice based on the D/A converter output (see Fig. 7), the data

stored in the transmission buffer having been packeted in certain time units (t) and being outputted via asynchronous transmission line interface to the asynchronous transmission line for the time unit (t), the data received from the asynchronous transmission line being stored via the asynchronous transmission line interface (DSP interface 38, see Fig. 7) in the reception buffer (Voice Sample FIFO, see element 6, Fig. 7), the data stored in the reception buffer being transmitted to the data reproducer (Resampler, see element 8, Fig. 7), the reception buffer being capable of storing data received from the asynchronous transmission line for a plurality of times ($n \times t$) in every unit time (voice samples are stored in Voice Sample FIFO, see col. 9, lines 15-26) and the data reproducer (Resampler, see element 8, Fig. 7) reproducing data when data for the plurality of times ($n \times t$) has been stored (see col. 9, lines 26-32 and 51-64).

Regarding claim 8, Sugar discloses the synchronous data transmission system according to claim 7, further comprising a sampling clock synchronizing means for synchronizing the sampling clocks of the sampling clock generators in the first and second terminals by inputting the output of the sampling clock generator in one terminal to the sampling clock generator in another terminal (synchronize a receiving clock's frequency with a transmitting clock's frequency by comparing the received clock rate to the local clock rate, see col. 1, lines 5-12 and col. 4, lines 56-61).

Regarding claim 9, Sugar discloses the synchronous data transmission system according to claim 7, wherein the frequency difference between the sampling clocks generated in the sampling clock generators in the first and second terminals is eliminated (a clock frequency

Art Unit: 2664

recovery is utilized where the receiver clock frequency differs from the transmitter clock frequency, see col. 4, lines 12-26) by inputting the clock from the sampling clock generator in one terminal (Received clock rate) to the sampling clock generator in another terminal (Received clock rate is compared to the local clock rate, see col. 4, lines 56-61).

Regarding claim 10, Sugar discloses the synchronous data transmission system according to claim 7, wherein the sampling clock frequency of one terminal is made closer to the sampling clock frequency of another terminal by estimating the sampling clock on the basis of the data received from the asynchronous transmission line (Resampler's clock is adjusted such that the received clock rate is equal to the local clock rate, see col. 9, lines 15-41).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,658,027 to Kramer et al.

US Patent 6,307,868 to Rakib et al.

US Patent 4,843,455 to Suzuki

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner